

IT Project Proposal Report - Detail

Agency: 064 - NEBRASKA STATE PATROL

Budget Cycle: 2019-2021 Biennium Version: AF - AGENCY FINAL REQUEST

IT Project : In-Car Video and Body Worn Cameras Purchase

General Section

Contact Name : Captain Kevin Ryan	E-mail : Kevin.Ryan@nebraska.gov	Agency Priority : 1
Address : 1600 Hwy 2	Telephone : 402-479-4926	NITC Priority :
City : Lincoln		NITC Score :
State : Nebraska	Zip : 68509	

Expenditures

IT Project Costs	Total	Prior Exp	FY18 Appr/Reappr	FY20 Request	FY21 Request	Future Add
Contractual Services						
Design	0	0	0	0	0	0
Programming	0	0	0	0	0	0
Project Management	0	0	0	0	0	0
Data Conversion	0	0	0	0	0	0
Other	0	0	0	0	0	0
Subtotal Contractual Services	0	0	0	0	0	0
Telecommunications						
Data	0	0	0	0	0	0
Video	0	0	0	0	0	0
Voice	0	0	0	0	0	0
Wireless	0	0	0	0	0	0
Subtotal Telecommunications	0	0	0	0	0	0
Training						
Technical Staff	0	0	0	0	0	0
End-user Staff	0	0	0	0	0	0
Subtotal Training	0	0	0	0	0	0

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Expenditures

IT Project Costs	Total	Prior Exp	FY18 Appr/Reappr	FY20 Request	FY21 Request	Future Add
Other Project Costs						
Personnnel Cost	0	0	0	0	0	0
Supplies & Materials	0	0	0	0	0	0
Travel	0	0	0	0	0	0
Other	0	0	0	0	0	0
Subtotal Other Project Costs	0	0	0	0	0	0
Capital Expenditures						
Hardware	0	0	0	0	0	0
Software	0	0	0	0	0	0
Network	0	0	0	0	0	0
Other	0	0	0	0	0	0
Subtotal Capital Expenditures	0	0	0	0	0	0
TOTAL PROJECT COST	0	0	0	0	0	0

Funding

Fund Type	Total	Prior Exp	FY18 Appr/Reappr	FY20 Request	FY21 Request	Future Add
General Fund	0	0	0	0	0	0
Cash Fund	0	0	0	0	0	0
Federal Fund	0	0	0	0	0	0
Revolving Fund	0	0	0	0	0	0
Other Fund	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0
VARIANCE	0	0	0	0	0	0

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IT Project: In-Car Video and Body Worn Cameras Purchase

EXECUTIVE SUMMARY:

This proposal involves replacing the aging In-Car Video (ICV) equipment currently in use by the agency. This equipment has been in use for over 10 years. Repairs are increasing and the equipment has outlived its service life. There is an expectation within society for added transparency and accountability demonstrated by law enforcement agencies. That expectation, coupled with new technology, makes the proliferation of body worn cameras (BWC) in addition to cameras mounted in the patrol vehicle (ICV's) a project worthy of the agency's efforts.

The acquisition of ICV and BWC equipment will allow transparency and accountability to citizens. This equipment will allow live video and audio streaming when intended by those for whom access has been granted.

GOALS, OBJECTIVES, AND OUTCOMES (15 PTS):

The goal of this project is to include purchasing roughly 325 ICV's and 325 BWC's to equip uniformed troopers and investigators and some of their supervisors as appropriate, who routinely contact the public through their sworn positions in the agency. The objective is to fully integrate these devices to work with each other and allow editing through a single back office which would enable copying, and transmitting to prosecutors and storage. The files will be linked to the case in the Niche System which is used for case management. These digital files would be used for successful prosecution of crimes and investigative purposes. The outcome of this project is increased transparency and accountability.

PROJECT JUSTIFICATION / BUSINESS CASE (25 PTS):

Justification for this project centers around the following positive outcomes: (1) Improved case management in the Niche Records Management System, (2) Successful prosecution of crimes, (3) A valuable tool for investigative purposes, and (3) Benefits realized by our citizens and society due to increased transparency and accountability.

The beneficiaries of this project are, first and foremost, the citizens being served by the agency. This benefit is through a factual representation of contacts with law enforcement personnel. Secondly, the sworn members who would utilize this technology would benefit from additional coverage of the activities they engage in to perform their jobs. Measurement of this success would be through sworn members being able to quickly, completely, and without unreasonable delay upload their videos for storage when arriving at certain selected outposts or headquarters office in their areas of jurisdiction. Many would benefit, as they do now, from allegations made regarding their activities from which there is no factual basis. Finally, the criminal justice system would be a beneficiary through having clear, accurate, factual documentation from which prosecution and defense decisions would be made.

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This project fits into the agency's overall technology plan for providing up-to-date equipment that works with current operating systems and related applications, and meets criminal justice information systems (CJIS) security requirements. In addition to new camera equipment, this project will require an upgrade in networking at strategic locations to handle uploading of large files. This fits with the agency's IT plan for moving away from cellular connection in office locations and using broadband or fiber connection with a sit-to-site VPN managed by the Office of the CIO. By making the networking changes, it will also increase the bandwidth at those locations as needed, and allow increased speed for communications on the network. The agency has also been reviewing storage options for large files and this project will also require large storage capacity. Providing a storage solution for this project will overlap into other areas of the agency that also need a large storage solution.

The tangible benefits to this project are limited due to the large expense associated and does not outweigh the increase the agency is seeing in the number of repairs necessary for our current In-Car Video systems which are aging.

However, the intangible benefits include an increase in the confidence that our sworn officers would have in the equipment they are using to do their jobs. With the increased failure rates in our current systems, many troopers' confidence has waned after random failures repeatedly occur. Transparency in police work has increased within society. And this will not diminish in the years to come. As more and more agencies employ body worn camera technology, it becomes more an expectation within society to memorialize contacts between law enforcement officers and the public they serve. Troopers greatly benefit by easily refuting complaints regarding their actions that can be reviewed, especially with two cameras recording rather than just one.

Additionally, the ability to digitally share videos as evidence with others in the criminal justice system is enhanced over the cumbersome practice of burning videos to a disk and sending and maintaining a physical copy until cases are adjudicated.

The implications of doing nothing are not in compliance with the current policy and procedures of this agency, as troopers are required to have operational equipment recording the enforcement actions taken within the scope of their duties. The agency has a duty to provide equipment which performs in a consistent and reliable fashion enabling its troopers to comply with policy requirements. The citizens served by this agency deserve to have the ability to review the actions taken against them if necessary to adjudicate their case, as to the prosecutors and defense counsel.

TECHNICAL IMPACT (20 PTS):

This project will replace the equipment currently in use which is over 10 years old. The support requirements are higher for this aging equipment, and it is becoming difficult to make the equipment work with the newer software and hardware in use at the agency. The new plan for video cameras enhances what is currently available by adding body worn cameras and provides the ability to link the video files to other applications currently in use at the agency. In particular, video files will be electronically linked to an investigative case in the Niche records management system.

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This project includes the evaluation and purchase of dash cameras, body worn cameras, network resources for transferring the video from the cameras, and an evaluation of storage options for storing the video. It may include evaluation of tools for working with the video, depending upon the camera solution selected. The agency is reviewing data retention schedules for files of this nature as the storage requirements will be very large.

At this time, the agency is evaluating vendor products. Whichever vendor is selected, the same issues will be present with regard to clearing video off of the cameras, networks needed to upload the video to storage area, and determining the optimal storage area.

The concept of this technology is not new to the agency. The officers have experience using dash cameras and working with video generated. The IT support team has experience installing the software, troubleshooting, and supporting the officers with the use of the product.

The State Patrol has 50 offices throughout the state and many are in remote locations. The network provider options in some locations are limited and there are limitations on bandwidth available. In some locations, the cost is very high. The agency is evaluating the network in 25 locations, and has a plan to upgrade those sites. Where possible, the agency has been co-locating with other state or government agencies to share costs.

The introduction of body worn cameras will increase the number of large video files generated and will require the agency to select a storage solution that will accommodate the security requirements, allow for sufficient growth, and be affordable. The agency has been in conversation with the Office of the CIO and is working through a solution for storage that may include a combination of on-premise storage, cloud storage provided by the State and cloud storage provided by a 3rd party. It will require classification of all video files to determine accessibility needs for each type of file and retention for each type of file. Based upon the classification of the files, that will determine the storage solution that will be used for each file. The challenge will be making all of those solutions work together seamlessly. The Office of the CIO has a proof of concept ready and the State Patrol will be evaluating that solution along with 3rd party solutions.

All vendors evaluated work with law enforcement and understand the need for security and encryption of files in transit and at rest. The solution will be scalable with the ability to add more cameras if needed, more storage or increase network bandwidth as the agency's need for video grows.

The solutions evaluated will meet all NITC guidelines and standards as well as all Criminal Justice Information Security (CJIS) Standards.

PRELIMINARY PLAN FOR IMPLEMENTATION (10 PTS):

The agency has had a pilot project with body worn cameras used by Investigators and Carrier Enforcement Officers for more than one year. This project identified key areas where

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additional support for this technology would be needed.

The agency has been researching solutions that fit within the broad category of recording systems for law enforcement. Multiple vendors have been evaluated based on many different features of which the equipment is capable. From this group of vendors, a short list of vendors will install systems to be used in the field and scored by those employing them. The equipment will be scored on attributes such as whether the display is a separate monitor rather than displayed within the mobile data computer, integration between the body worn camera and the in-car camera, field of view, live streaming capability, video quality and storage requirements, as well as ease of use. Ideally, a system will be selected which is capable of the following attributes, among others:

- Uses a separate display not through the MDC (mobile data computer),
- High quality video that can record in different resolution modes to minimize storage space yet maximize resolution for high liability encounters as needed,
- Easy to install package with a minimal footprint,
- Both cameras ICV/BWC are integrated with each other,
- User-friendly back office for editing and up-loading.
- Can rewind and fast forward recordings while actively recording events,
- Live stream video from the ICV, with an easy upgrade to include the BWC in the future if not already available,
- Up-loadable video requiring only one set of equipment per officer/outpost office,
- A secure method of transmitting the video and storing the video, with files encrypted in transit and at rest, meeting FBI CJIS security requirements.

RISK ASSESSMENT (10 PTS):

The greatest risks to this project are with network infrastructure and storage. The State Patrol is not set up in all locations to move large video files off of cameras, and the agency does not have large amounts of storage available at this time.

The agency has identified 25 locations throughout the state that will be used for uploading video from the cameras to storage. The agency has started the evaluation of the sites and is working with the Office of the CIO to upgrade those locations from cellular modem service to a minimum of 20M/20M broadband or fiber network service.

The agency is working with the Office of the CIO to determine if the State's large storage solution will work for the agency. Amazon Web Services, Evidence.Com and Microsoft Azure are also being evaluated for storage. Depending upon the camera solution selected, that may affect the storage solution selected, and the agency may need to find video management tools for the officers to use to work with the video and prepare it for court cases.

The camera solutions the agency is evaluating is newer technology, but the vendors have had prior versions in use with many other agencies. It is stable technology with some additional new features.

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FINANCIAL ANALYSIS AND BUDGET (20 PTS):

The agency has received 4 preliminary quotes from vendors. These vary greatly in cost, ranging from \$1.450 million to \$4.021 million for equipment, and ranging from \$375,000 to as much as \$3 million (unlimited data) for cloud storage.

The agency has determined a budget for the equipment that will range from approximately \$2.2 million to \$3 million. Storage costs are estimated to range from \$500,000 - \$1 million per year. Clearly storage costs will be driven by the amount of data that is stored, and will increase as the volume of data grows. An implementation plan spanning a 2 year period has been determined as the best option from a fiscal perspective.

Funds have been identified and are budgeted within the Public Safety Communication Cash Fund for purposes of funding the equipment and on-going storage costs. Approximately \$1.95 million has been set aside fiscal year 2019, \$1.05 million for fiscal year 2020, and \$1.05 million for fiscal year 2021. These funds are set aside to cover the all-in costs to include the equipment, storage, installation, and training costs anticipated with this project. Because a vendor has yet to be selected, the Agency has chosen to set aside a high estimated cost in order to ensure the success of the project, and also to ensure that there is not a shortfall in funds from a fiscal perspective. The Agency is not submitting a budget issue for this project, as sufficient appropriations exist within Program 850.